

from time to time we witness, as it were, a rupture or a recall to order which is sometimes fatal.

If an organ is too rapidly modified by a particular preponderant influence for the rest of the organism to follow it continuously in an equilibrate manner, it frequently happens, either that the progress of the variability is arrested in this first direction, or that the variety in course of formation is extinguished under these new conditions.

Nature, fortunately, is not so hasty as man in her requirements; she has had and still has ample time in which to work.

XLV.—*Descriptions of several African and Australian Lepidoptera in the Collection of the British Museum.* By ARTHUR G. BUTLER, F.L.S., F.Z.S., &c.

FOUR of the new species here described have recently been selected from a small collection, of great interest, made at Lake Nyassa by F. A. A. Simons. This collection was especially rich in two species of *Papilio* (*P. porthaon* of Hewitson, a butterfly new to the Museum series, and *P. nyassæ*, here described); there were also several forms of the difficult genus *Teracolus* (but chiefly identical with those from Natal), several species of *Acræa* (one of which will probably prove to be new to science), a few obscure little species of *Lycæna* and *Pamphila*, a little black-and-white *Liptena*?, and several very striking moths.

The Rockhampton collection contained (besides the beautiful Sphinges here described) several obscure forms of Noctuides and Crambites, an example of *Catopsilia hinda*, and other named species which were previously desiderata to the Museum.

RHOPALOCERA.

1. *Mycalesis Simonsii*, n. sp.

♂ ♀. Wings above sandy yellow, with a straight, transverse, pale-bordered, light brown postmedian line across both wings; costal and apical areas of primaries red-brown, particularly in the female, the base and outer border more or less tinted with the same colour; the margin and a submarginal line darker brown; two white-pupilled black ocelli, one small towards the apex, the other large between the first and second median branches: secondaries with six more or less strongly indicated discal black dots; outer margin red-brown; female with a slender submarginal red-brown line. Under surface

pale rusty reddish, mottled with ferruginous; the basal area bounded externally by a pale-bordered postmedian ferruginous line, deeper in colour than the basal area; a marginal line, and indications of a submarginal line, ferruginous: primaries with the ocelli less distinct than above, an additional smaller indistinct ocellus above and below the subapical one: secondaries with an irregular ferruginous line crossing the cell; discal dots more distinct than above, more or less pupillated with white. Expanse of wings 1 inch 10 to 11 lines.

Lake Nyassa.

Type, B.M.

Allied to *M. eliasis*.

2. *Teracolus mutans*, n. sp.

Allied to *T. vesta*; the markings above the same, but the coloration quite different, linking it to *T. protomedia*, *T. coliagenes*, &c.

Wings above sulphur-yellow, the base shaded (but not broadly) with lilacine gray; primaries tinted towards the base with pale salmon-colour; otherwise as in *T. vesta*. Expanse of wings 2 inches.

Lake Nyassa.

Type, B.M.

My prediction respecting the unbroken chain of nearly allied species in this genus is being rapidly fulfilled; since the publication of my paper on *Teracolus* we have received no less than five of the missing links appertaining to this section of the genus alone.

3. *Teracolus argillaceus*, n. sp.

Allied to *T. vesta*, but smaller, whiter at the base, much less dusted with blackish; markings the same: below with the apical area of primaries and the whole of the secondaries, excepting a slightly yellowish central band (enclosed by the two central angular bars), reddish clay-colour; darker markings below much less distinct. Expanse of wings 1 inch 7 lines.

Natal (*Buxton*).

Type, B.M.

This species is intermediate between *T. vesta* and *T. chrysonome*, although most nearly allied to the former of the two. We have two examples; and Mr. Buxton tells me that he has others amongst his duplicates. From the upper surface alone it might be mistaken for a pale form of *T. vesta*; but the coloration of the under surface is very distinct.

4. *Papilio nyassæ*, n. sp.

Intermediate between *P. polices* and *P. antheus*: green and black. Markings of the primaries as in *P. polices*, excepting that the bands which cross the cell are zigzag, as in

P. antheus; markings of the secondaries above as in *P. antheus*, excepting that the band which crosses the cell from costa to anal spot is broad, as in *P. policeses*, and the submarginal grey patches are broader. Wings below pale silky greyish brown; the green markings paler than above, and for the most part bordered internally with black: secondaries crossed near the base by two equally broad brown bands parallel to the abdominal margin; *no black spot in the cell*; a red-bordered subcostal black spot as in *P. antheus*; *no pale greenish spot* below the carmine subanal bars, as in *P. policeses*; the grey patches broader and with narrower black borders. Expanse of wings 3 inches 9 lines.

Lake Nyassa.

Type, B.M.

This and *P. porthaon* seem to be the commonest butterflies of the district.

HETEROCE RA.

5. *Chærocampa indistincta*, n. sp.

Primaries above whitey brown, with a slightly deeper cloud over the lower half of the discal area; the whole wing irrorated with blackish scales, which become dense and linear towards outer border; a black dot at the end of the cell; three parallel oblique pale brown discal lines from inner margin to second subcostal branch, whence they appear to form an abrupt angle inwards to costa, but become very indistinct; a short apical dusky dash, secondaries smoky brown; costal area silky whitish; anal angle whitish; external border narrowly greyish white, irrorated with brown: head and thorax olivaceous, bordered with white; abdomen pale pinky brownish or sordid flesh-colour, whitish at the sides. Primaries below sordid flesh-colour, the basal area, excepting the costa, dusky; the remainder of the wing irrorated with blackish; a broad pale outer border; a black subcostal spot towards apex: secondaries flesh-colour, whitish towards abdominal margin, irrorated with greyish atoms; traces of two central parallel transverse lines, the outer one indicated by black dots upon the nervures: body below pinky whitish. Expanse of wings 4 inches 2 lines.

Rockhampton, Queensland.

Type, B.M.

The primaries above, when looked at from the side, have a silky greyish appearance, but from the front they have a sandy tint; the outer border is broadly but very indistinctly paler.

This species is most nearly allied to *C. gonograptæ*; it is also allied to *C. deserta* and *C. punctivenata*: in the absence of the lateral black spot at base of abdomen it agrees best with *C. deserta*.

6. *Daphnis magnifica*, n. sp.

Allied to *D. pallescens*, but considerably larger, altogether deeper in colour, with the abdomen distinctly banded; the secondaries with a broad waved central pale band, and without a pale external border.

Primaries above almost as in *D. hypothous*, but more sharply defined, the transverse pale pinky band across the basal third of twice the width and clearer in tint; the pale postmedian area broader, more arched, clearer and paler; the irregular area near external angle brown, varied with slaty grey: secondaries cream-colour, slightly obscured (with the exception of the basal and costal areas and a slender waved transverse discal line) with pale greenish grey; a broad irregular central band, not reaching the costa or the anal angle, black-brown, surrounded and interrupted by dark greenish grey; a broad external border deep purplish brown, shading off internally and at apex into greenish grey, and intersected near anal angle by a slender pale submarginal line: head and collar dull lilac, intersected by lines of testaceous; antennæ yellow; thorax dull lilac, varied behind with olive-green, and with lateral tufts of testaceous hair; metathorax olive-green, broadly bordered behind with white; tegulæ olive-green, with a broad creamy white external border and a slender internal testaceous margin; abdomen dorsally pinky greyish, the basal segment olive-green, the remaining segments, excepting the last, with lateral oblique converging olive-green bars; the terminal segment grey, crossed by an olive-brown horseshoe-like band; the four basal segments bordered with creamy whitish in front; abdomen laterally much more pinky in tint than the dorsal surface: below with the general aspect of *D. hypothous*, the markings much the same, but altogether darker and of a purple tint, none of the bright red so prevalent on that species being present. Expanse of wings 4 inches 9 lines.

Rockhampton, Queensland.

Type, B.M.

The most magnificent of all the species of *Daphnis*.

7. *Phaëgorista formosa*, n. sp.

Allied to *P. agaristoides* from West Africa, but readily distinguished by the markings of the primaries; the internal border black to the base, the large triangular ochraceous patch on the basal area darker and tinted with rose-colour; the oblique white or pale yellow band of primaries replaced by a very broad, almost semicircular, bright ochreous patch; the hastate spot near the external angle replaced by a triangular

bright ochreous spot: the band across the base of the abdomen reddish. Expanse of wings 2 inches 5 lines.

Lake Nyassa.

Type, B.M.

A very beautiful and distinct species, reminding one of *Eusemia superba*.

8. *Anaphe ambrizia*, n. sp.

♂. Allied to *A. reticulata*, but considerably smaller, the primaries narrower, silky white, the bands comparatively broader and darker, the two streaks from the outer margin much more convergent, leaving a very small spot of the ground-colour between them at their internal extremities; secondaries paler, silky stramineous; thorax (like the bands of primaries) chocolate-brown; head tawny with blackish vertex; tegulae pale yellow; abdomen pale ochreous, with the hind margins of the segments dark brown. Expanse of wings 1 inch 5 lines.

Ambriz (Monteiro).

Type, B.M.

Readily distinguished from *A. reticulata* and *A. panda* (which is probably only a variety of the same) by its smaller size, darker markings, and differently coloured body. *A. reticulata* is well figured by Herrich-Schäffer under the name of *Arctiomorpha euprepiaeformis*.

The genus *Anaphe* seems to be best placed between *Marana* (to which several species described under the generic name of *Teara* are referable) and *Numenes*.

9. *Saturnia flavida*, n. sp.

Allied to *S. apollonia*, with the same general character of markings, but the ground-colour of the wings sulphur-yellow, the two lines indicating the limits of the central band wide apart throughout their entire length, the ocelli of the primaries smaller and therefore agreeing better in size with those of the secondaries, the outer border of a more rosy tint, with the pink and white submarginal band of oval spots better defined, the inner transverse line of secondaries well defined, the body (especially of the female) darker and of a more decidedly testaceous colour. Expanse of wings ♂ 3 inches, ♀ 3 inches 1 line.

Zambesi.

Type, B.M.

This is decidedly the most attractive species yet described; it is smaller and altogether more brilliantly coloured than *S. apollonia*: the male example has a curious modification of the left primary, the outer line of the central band being deeply excavated near the costa, so as to make room for a semicircular, red-bordered, pink spot.